SUBJECT INDEX

A1 Project overview 338
Adhesion agent 315
Aggregation; cells in pulsatile flow 373
Alginate 372
Amylose; entangled behaviour 303
Aortic stenosis; supravalvular 372
Ball clay processing 351
Bead-spring polymer melts 285
Belite cement strength 351
Bifurcations; sub and supercritical 289
Binary solutions; density, viscosity 365
Bingham & Williamson materials 315
Bingham fluid 262
Bingham material 265
Bingham-like viscous fluid 259
Biomaterials 287
Biomer 307
Birefringence 280
Birefringence; planar entry flow 341
Bisphenol A polycarbonate 280
Blend physical properties 303
Bone properties 275
Book review 376
Brittle-ductile transition 319
Bromobutyl rubber composites 329
Brownian dynamics 271, 272
Bubble behaviour 299
Bubbles drops and particles 376
Bubbly liquids; stress tensor 355
Capsule deformation in flow 356
Carbon black in elastomer 281
Carbon black loaded elastomers 276
Cardiac cycle 370
Cellulose fibers; in composites 342
Chitosan 372
Circular pipe 263
Coal slurry transportation 344
Coating colour runnability 350
Coextruded films 350
Collagen; injectable 287
Compressible laminar flow 266
Concentrated disperse suspension 354
Concentration fluctuations 278
Concentric annuli 259
Conductive composites 316
Cone and plate flow 264
CONNFFESSIT approach 294
Contraction flow LLDPE melt 341
Coronary microcirculation 374
Coronary vessels 370
Cytoplasm; large deformation 373
Damping function 267
Dangling segments 310
Deborah number 255
Deborah number 358
Densities and viscosities 301
Densities & viscosity 364, 366, 367, 368
Die extrusion 317
Dielectric & ultrasonic relaxation 286
Diverging radial flow 270
Drag of a sphere 266
Drag reduction 298
Droplet breakup 369
Ductile fracture; polyester 328
Dynamic moduli; PE 336
Electrorheological systems 358
Entangled polymers 267
Epoxidized natural rubber 285
Epoxy composites 287
Epoxy resin toughening 323
ER effect; numerical analysis 363
ER effects 361, 362
ER fluids; aggregation kinetics 360
ER fluids; cluster formation 360
ER fluids; properties 265,363
ER properties of suspensions 364
ER suspension; transient stresses 362
Erythrocyte sedimentation 359
Expansion flow 299
Extensible microstructure 268
Extensional flow birefringence 334
Extensional flows 283
Extrudate swell 340
Fedors equation 302
FENE bead spring chains 272
FENE dumbbell model 270
FENE equations 262
Fiber orientation 270

SUBJECT INDEX

Fiber-spinning conditions 332
Fibre suspension 358
Fibre-styrenic composites 282
Fibril formation 307
Film properties 313
Finite element simulation 278
Flow birefringence 348
Flow; O/W emulsions 360
Flow; periodic array of cylinders 369
Fluidized bed 352
Foam; water-blown polyurethane 321
Foams; ramdom 375
Food in a wedge 268
Fractal structure of complexes 372
Free-surface segregation 275
Galerkin finite element method 295
Gel point 279
Gel time 280
Gelatin 279
Glass fibres in PET 330
Gleissle and Yamamoto relations 296
Granular flow 356
Granular flow rheology 354
Gravity waves 256
Gravure roll coating 273
Hadamard-type stability 294
Horizontal canal 256
Hybrid-particulate composites 287
Hytrel composites 310
Injection moulding 326
Injection-molded parts 342
Interfacial instabilities 293
Internal viscosity 269
Intrinsic viscosity 304
Irradiated PE 312
Izod impact toughness 306
Izod testing instrumented 310
Jute composites 327
K-BKZ equations 267
Kaolin slurries 350
Knife-coating process 330
Latex dispersions 313
Lift on sphere 266
Light scattering 297, 299
Line spectra generation 297
Liquid crystal elongational flow 301
Liquid properties 365
Liquid-crystal polymer 290
Low-density PE 284
Lubrication flows 259
Mastercurves 272
Maxillofacial elastomers 325
Maxwell fluid 263
Mechanical properties; prediction 347
Melt blowing process 301
Melt rheology 284
Melt spinning behaviour 347
Microcirculation; regulation 374
Microgel process 323
Microstructure in flow 355
Mixing characteristics 274
Modelling viscoelastic flow 271
Multiple emulsions W/O/W 349
Neck propagation; PET films 304
Necking in spinning 339
Nematic polymers 270
Nematic polymers; shear flows 332
Networks; interpenetrating 326
Newtonian liquid bridges 338
Non-linear stress-strain 291
Non-Newtonian fluidization 352
Nonlinear regularization 273
Numerical modelling; viscoelastics 292
O/W emulsions 353
Oldroy B equations 261
Oldroyd B 261
Oldroyd-B fluid 255, 256, 260,264
On-line viscometry 303
Optical anisotropy 311
Orthogonal superposition 258
Oscillating flow in HDPE 334
Oscillatory shear flow 340
Packed bed; non-Newtonian flow 374
Particle deposition 350
PE/PS blend 343
Peristaltic motion 256

SUBJECT INDEX

PET melts 296
PET yarns 284
Pigment dispersing resins 346
Planar entry flow 341
Poisson's ratio 288
Polycarbonate; crack initiation 318
Polydimethysiloxane 313
Polyelectrolyte solutions 339
Polyimide; spin coating 311
Polymer gels 288
Polymethyl methacrylate 277
Polyolefin film 315
Porous media flow 340
Pretransitional ordering 337
Process-zone in polycarbonate 308
Prolate spheroids; Stokes flow 358
Propellants 320
PS-PVME mixtures 346
Pulp suspensions 349
PVC in slit flow 344
Quemada fluid 256
Rat coronary artery 370
Red cell membrane rigidity 371
Relaxation; dielectric & ultrasonic 286
Reptative chains 277
Resins; multifunctional 316
Rheo-optical spectroscopy 284
Rheology; concentrated dispersion 353
Rheology; foams 375
Rheometry-creep mode 275
Rigid ellipsoids suspensions 269
Roll-cell instabilities 330
Rotational flow 277
Rubber elasticity 281
Rubber vulcanizates 329
Rubber-toughened PMMA 292
Second normal stress difference 345
Sedimentation; erythrocyte 359
Self-diffusion; polymer solutions 344
Service lifetime of PE 308
Sharkskin extrusion 333
Shear creep behaviour 305
Shear-induced diffusion 356
Shear-induced textures 335
Shear-thickening 297, 299,348
Shear-thickening kinetics 335
Shrinkage; composites 324
Silica suspensions 352
Silicone fluids 296
Silk fibers 283, 314
Silk; methacrylate-grafted 318
Sisal-reinforced rubber 330
Slip and antiblock agents 315
Small amplitude oscillations 258
Soap film meter 375
Spinning rheology 347, 348
Spinning, high speed 339
Squeezing flow 268
Stack-disc filters 273
Star poly(vinyl ether) 294
Stokes flow 357, 358
Strain-coupling effects 278
Stress jumps 288
Structure formation 297, 299
Structure-property estimation 312
Sulfur 315
Suspension of spheroids 357
Suspensions in viscoelastic liquids 290
Synovial fluids 371
Taylor-Couette flow 293
Tear strength 326
Ternary blends 309
Thermotropic copolyester 334
Thickener; associative 313
Thixotropic fluid 263
Transient network theory 336
Transient normal stresses 300
Transient thermal flows 265
Transient viscoelastic flow 293
True yield stress? 259
Turbulent mixing 274
Two-phase models 258
Ultrasonic relaxations 286
UV curable acrylates 319
Vasoactive properties; rat artery 370

SUBJECT INDEX

Vibrating jet 261
Vibration damping 287
Viscoelastic liquids-unsteady flow 278
Viscoelasticity Kernels 256
Viscosities and densities 301
Viscosity; bidisperse suspension 354
Viscosity; crude oil mixtures 368
Viscosity; predictions for mixtures 368
Viscosity; saturated liquids 365
Viscosity; semidilute suspension 354
Void production in pancakes 319
Wall slip 298
Wall slip in extrusion 335
Wall slip; concentrated dispersions 353
Warpage internal stresses 306
Weissenberg numbers 260
Wollastonite in PECH 283
Wood in composites 286
X-ray scattering; HPC solutions 302
Xanthan 291
Yield stress; existence of 359
Yielding in polymer glasses 345